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February 26, 2021

**SUBJECT: Request for Proposal / RFP #142F-20 / Midlife Overhaul of 60 New Flyer Forty-Foot Hybrid Buses**

**Addendum No. 5**

Dear Bidders:

Please be advised that the above has been amended and/or clarified as shown on the attached that is made a part of herein.

Acknowledgment of this Addendum must be so noted on your proposal submittal.

**ALL ELSE REMAINS AS PREVIOUSLY STATED.**

Sincerely,

Joe Flynn

Sourcing Executive

Attachments

**MBTA**  
**RFP 142F-20 / Technical Specification VE20-051**

**CLARIFICATIONS**

The Authority has reviewed RFCs provided and has made best efforts to answer all RFCs submitted. Please be advised all questions should be submitted using the RFC form provided in RFP 142-20 Attachment 1.

The following clarifications to questions/RFCs received are provided:

**General Clarification:**

The Authority recommends all Proposers review RFP 142F-20, including Technical Specification VE20-051 and all attachments, and Addendum, in their entirety. Bidders are responsible for developing a cost to perform the scope of work required for all tasks outlined in RFP 142F-20 and Technical Specification VE20-051. The Authority will review/approve work scope, procedures, and material, as part of the Design Review Process.

**Question 1:**

Ref: RFP 142F-20 - Technical Specification VE20-051 Section 3.11.2

*Can MBTA provide part numbers for filters mentioned in Filters/Lines 3.11.2?*

**Response 1:**

Please reference the parts manual provided via this Addendum No. 5, which is attached as a separate document.

**Question 2:**

Ref: RFP 142F-20 - Technical Specification VE20-051 Option 6

*Is this specifically stipulating the use of a BAE PHEV system or could Cummins participate with their product as well?*

**Response 2:**

Any manufacturer is welcome to participate as long as the conditions of the RFP, Technical Specifications, and TS Attachment 6 – Plug-in Hybrid Retrofit are met. Reference TS Attachment 6 excerpt below:

*The Contractor shall work closely and forge a relationship with the bus manufacturer, existing hybrid drive system OEM, and other component OEMs, to optimize systems' efficiencies while developing strategies for weight control and fitment to the existing bus structure and meet PHEV bus performance requirements.*

**Question 3:**

Ref: RFP 142F-20 - Technical Specification VE20-051 Section 3.12.4

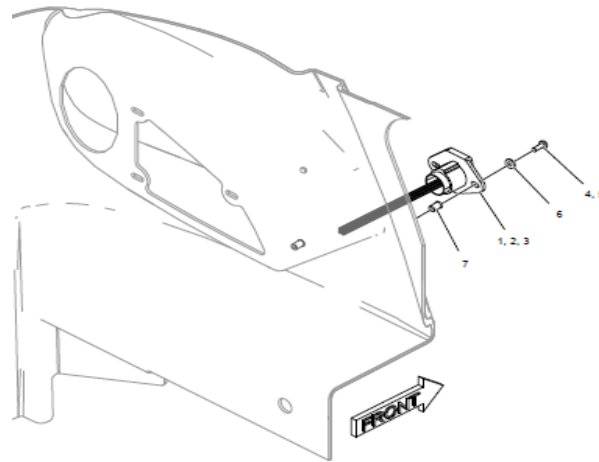
*The first paragraph of Section 3.12.4. provides: The Contractor shall replace tow connector air fittings (per MBTA configuration).*

*The second paragraph adds: “The Contractor shall install a front electrical tow connector similar to the installation on the Authority’s newer fleets utilizing existing vehicle harness.”*

*Please clarify the MBTA configuration for tow connector air fittings and front electrical tow connector*

**Response 3:**

Please reference the Parts Manual for the SR1983 bus fleet. This attachment was provided in Addendum No. 4. See excerpt below. The Bidders proposed design / solution for TS Section 3.12.4 will be reviewed as part of the design review process.



| ITEM | QTY | PART NUMBER | DESCRIPTION   |
|------|-----|-------------|---|
| 1    | 1   | 5955459     | Receptacle, Towing                                  |
| 2    | M/B | 055701      | Adhesive, SikA 221 White                            |
| 3    | 1   | 019295      | Boot, Receptacle                                    |
| 4    | 2   | 14504012    | Screw, PH Cross Recess SST 1/4" - 20 UNC x 3/4" Lg. |
| 5    | M/B | 051034      | Loctite, 243 Blue                                   |
| 6    | 2   | 50W04000    | Washer, Flat SST 1/4"                               |
| 7    | 2   | 514577      | Insert, SST 1/4" - 20 UNC x .165" - .260"           |

**Question 4:**

Ref: RFP 142F-20 Technical Specification VE20-051 Section 3.12.2 Battery Trays

*Section 3.13.2. requires a revised battery securement and hold down system designed in a more robust manner / material to prevent hold down breaking / damage.*

*Please clarify what is failing with the current system.*

**Response 4:**

The battery spacers (between each of the four batteries) are failing on this fleet. A redesigned or reinforced spacer will be needed. The Bidders proposed design / solution for TS Section 3.12.2 will be reviewed as part of the design review process.

**Question 5:**

Ref: RFP 142F-20 Technical Specification VE20-051

*Is the Contractor required to be an Eligible Transit Vehicle Manufacturer with the FTA?*

### **Response 5:**

The Contractor is not required to be an Eligible Transit Vehicle Manufacturer.

### **Question 6:**

Ref: RFP 142F-20 Technical Specification VE20-051 Section 3.25.6

*Section 3.25.6. indicates: “a shortened design review process may be required as part of this option due to differences in bus design configuration and components.”*

*Please provide manuals and clarify what is different and what design review process requirements will be.*

### **Response 6:**

**Please note,** Manuals for the option fleet were provided via Addendum No. 4.

The design review process will focus on the systems that differ on the option buses to be overhaul. See below table which provides a high-level overview of the two MBTA bus fleets. This table is not meant to be complete. Additional new and/or improved items may be required to be reviewed/approved as part of the design review process.

| New Flyer Fleet ID #  | SR1881/1902 (Purchased in 2014-2015)<br>60 Hybrid Buses                | SR1983 (Purchased in 2016-17)<br>156 Hybrid Buses                       |
|---|--|---|
| Front Axle  |  |   |
|   | No Significant Differences   |   |
| Rear Axle   |  |   |
|   | No Significant Differences   |   |
| Steering System   |  |   |
|   | Trunk mounted electric driven compressor                               | Electric driven pump under driver platform                              |
| Engine System   |  |   |
|   | Cummins ISB - Serial Number 73722594                                   | Cummins ISB - Serial Number 73764813                                    |
| Hybrid System   |  |   |
|   | BAE Gen II Hybrid-Drive A123 11.8kw Battery                            | BAE Gen II Hybrid-Drive A123 11.8kw Battery                             |
| Cooling System  |  |   |
|   | EMP MH-9 Electric fan system   | EMP MH-5 Electric fan system  |
| Fuel System   |  |   |
|   | No Significant Differences   |   |
| Air System  |  |   |
|   | Powerex air compressor coupled to power steering pump                  | Powerex air compressor with dedicated motor                             |
| Electrical System   |  |   |
|   | No Significant Differences - Multiplex (Vansco) programs are different |   |
| HVAC System   |  |   |
|   | No Significant Differences   |   |
| Structure & Chassis   |  |   |
|   | Carbon steel chassis   | Feretic stainless steel chassis   |
| Interior Panels   |  |   |
|   | No Significant Differences   |   |
| Exterior Panels   |  |   |
|   | No Significant Differences   |   |
| Windows   |  |   |
|   | No Significant Differences   |   |
| Access Doors  |  |   |
|   | No Significant Differences   |   |
| Entrance And Exit Doors   |  |   |
|   | No Significant Differences   |   |
| Seating and Stanchions  |  |   |
|   | 4ONE Gemini/Angel with Curbside and Streetside Wheelchair Stations     | American Seating Insight Prime with Tandem Curbside Wheelchair Stations |
| Destination Signs   |  |   |
|   | Luminator-Twinvision Smart Series 2                                    | Luminator-Twinvision Smart Series 3                                     |
| Camera System   |  |   |
|   | No Significant Differences   |   |
| Driver's Protection System  |  |   |
|   | No Significant Differences   |   |
| Driver's Controls   |  |   |
|   | No Significant Differences   |   |
| Wheelchair Ramp   |  |   |
|   | No Significant Differences   |   |
| Note: This table is provided for reference only. The Contractor is responsible for reviewing manuals and vehicle coniauration information |  |   |

**Question 7:**

Ref: RFP 142F-20 Attachment 4, Item 10

*Item 10 of Attachment 4 provides: "Details on the proposed final assembly workscope and location to be provided with submission."*

*Please clarify whether anything more than a statement that all final assembly workscope will take place in [City], [State], USA will be required*

**Response 7:**

RFP 142F-20 Attachment 4, Item 10 refers to the general location - [City], [State], USA for the final assembly workscope.

**Question 8:**

Ref: RFP 142F-20 Section 12.2.7

*12.2.7. requires the bidder include proof of insurance consistent with the requirements of Section 3.2.*

*Section 3.2 requires insurance certificates 7 working days prior to contract execution. This is consistent with general practice as insurance providers will not normally provide proof of insurance on a contract without intent to award.*

*Please clarify that a statement from the Contractor that it intends to comply with the insurance requirements will be acceptable.*

**Response 8:**

A statement from the bidder that it intends to comply with the insurance requirements will be acceptable in the proposal.

Insurance certificates will **absolutely** be required prior to contract execution / Notice to Proceed.

**Question 9:**

Ref: RFP 142F-20 Technical Specification VE20-051 Section 12.2.8

*Item 12.2.8. requires three years of audited financial statements along quarterly statements, if any.*

*Entire audited financial statements for three years would be more than 100 pages long.*

*Please clarify that one confidential copy of the balance sheet and statement of operations covering the last three years will be sufficient and will not count toward the 100-page limit*

**Response 9:**

Financial statements will not count toward the 100-page limit of the Technical Proposal.

**Question 10:**

Ref: RFP 142F-20 Technical Specification VE20-051 Section 12.1

*Section 12.1 limits the technical proposal response to 100 pages. There are many required documents that, if counted, would significantly detract from the substance of a proposal. As such, please clarify that*

*section dividers and the following items can be included as Attachments which will not be counted in the 100 Page limit.*

**Response 10:**

Attachments will not count to the 100-page limit for the Technical Proposal.

**Question 11:**

Ref: RFP 142F-20 Technical Specification VE20-051

*Can you please provide parts and service manuals, electrical schematics and all ITS for the 60 bus fleet as well as the option buses?*

**Response 11:**

Parts and Service manuals are attached/provided in Addendum No. 5.

The Parts and Service manuals for the option buses were attached/provided in Addendum No. 4.

**Question 12**

Ref: RFP 142F-20 Technical Specification VE20-051 Section 3.7, 3.9

*Please provide engine and hybrid drive serial numbers for both fleets.*

**Response 12:**

Engine serial numbers are as follows:

60 Base hybrid buses (SR1881/1902) – 73722594

156 Option hybrid buses (SR1983) - 73764813

**Question 13:**

Ref: RFP 142F-20 Technical Specification VE20-051 Section 3.25.3

*Attachment 4 requires a Genetec License Plate Recognition System. Please provide a contact at Genetec that is familiar with this procurement*

**Response 13:**

Please contact Olivier Dumoulin, Regional Sales Manager, [odumoulin@genetec.com](mailto:odumoulin@genetec.com) for more information.

**Question 14:**

Ref: RFP 142F-20 Technical Specification VE20-051 Section 3.16.9

*Section 3.16.9. requires the driver's barriers be refurbished. Please provide a parts manual or part number for the current Arow barrier.*

**Response 14:**

The driver's barrier currently installed on MBTA's New Flyer XDE40 Excelsior Buses is Arow Global MV3080026. See attached parts/service manual provided in Addendum No. 5.

**Question 15:**

Ref: RFP 142F-20 - Technical Specification VE20-051

*Regarding Basis of Award, would MBTA consider changing from groups to awarding on a Line Item Basis?*

**Response 15:**

The contract will be awarded to one prime contractor.

**Question 16:**

Ref: RFP 142F-20 Section 7.3

*Section 7.3 of the RFP provides for liquidated damages for failure to meet the delivery schedule provided in Section 4.4.*

*The schedule in Section 4.4 requires delivery of the pilot bus no later than 22 weeks from Notice to Proceed. There are sole source vendors that are unable to commit to certain milestones, including, the 22-week schedule for delivery.*

*Please clarify that any delays resulting from sole source vendors' failure to meet the delivery schedule will not result in liquidated damages.*

**Response 16:**

The Prime Contractor is responsible for managing their sub-contractors, purchasing, and inventory to ensure compliance with the timelines provided in the RFP. Please advise and provide specific vendor claims if the delivery schedule cannot be achieved.

**Question 17:**

Ref: RFP 142F-20 Attachment 4, Item 5

*Item 5 of Attachment 4 requires a lower tier certification from all "Lower Tier Participants" and Attachment 5 requires a list of all Non-DBE Subcontractors.*

*Please clarify that lower tier certifications and descriptions of subcontractor activities are not required for all potential suppliers of materials associated with the overhaul and that forms and descriptions are only required for subcontractors that are performing services that require special skill*

**Response 17:**

Lower Tier Participants refers to sub-contractors that are performing labor services.

**Question 18:**

Ref: RFP 142F-20 Technical Specification VE20-051 Section 3.9

*As one bidder's ability to greatly control the price of a major component of the overhaul would preclude other potential bidders from competitively bidding on the project, the inclusion of the BAE aspects of this overhaul diminish competition as opposed to maximizing competition.*

*Please clarify that there is a path forward for qualified contractors to obtain the necessary training and certifications from BAE, if not:*

*Please clarify whether MBTA is willing to unbundle the BAE aspects of this overhaul.*

**Response 18:**

For more information regarding training, certification, and/or service options please contact Larry Fuehrer, Regional Sales Manager, [larry.fuehrer@baesystems.com](mailto:larry.fuehrer@baesystems.com).

The portions of the contract related to the overhaul of BAE systems will not be unbundled from the contract award. It is the bidder's responsibility to manage subcontractors appropriately.

**Question 19:**

Ref: RFP 142F-20 Technical Specification VE20-051 Section 3.8

*Section 3.8 requires cylinder certification within 6 months of installation and thermostat and backup batteries installed within 6 months of manufacture.*

*The sole source vendor, Amerex, cannot comply with these requirements.*

*Please clarify that Contractor will not be required to comply with timelines that the manufacturer cannot meet.*

**Response 19:**

The contractor is responsible for managing sub-contractors, purchasing, and inventory to adhere to the timelines required by the Contract. Please provide specific evidence that would prohibit compliance.

**Question 20:**

Ref: RFP 142F-20 Section 7.2

*Note 2 provides: "If awarded, Option 6 Overhaul of 156 Buses would follow a similar and adjusted incremental payment percentage."*

*The schedule is important for capitalization purposes and misunderstandings could create underfunding or higher prices. Please clarify how the schedule will be adjusted if Option 6 is awarded.*



**Response 20:**

Please insert the following Schedule of Partial Payments for Option Buses after Section 7.2 (p. 56)

**“7.2.A Schedule of Partial Payments for Option Buses**

“For reference, and if awarded, the Option 6 incremental payment schedule for 156 overhauled buses would resemble the following:

| Milestone | Incremental Payment % | Total Cumulative Payment % | Milestone Description  |
|-----------|-----------------------|----------------------------|--|
| A         | 5%                    | 5%                         | Up to 5% for completion/approval of a Pilot Bus/”Float” Bus Structural Teardown Report and Inspection Plan   |
| B         | 5%                    | 10%                        | Up to 5% for completion/approval of all Option 6 Design Review Submittals  |
| C         | 8%                    | 18%                        | Up to 8% for Authority approval of the “Baseline Design Configuration” and Conditional Acceptance of the Option 6 Pilot Bus  |
| D         | 2.5%                  | 95.5%                      | Conditional Acceptance of Option 6 Production Buses 2 through 156 (invoiced in <u>thirty-one groups of five buses</u> )  |
| E         | 2.5%                  | 98%                        | Resolution of all open Technical, Commercial, and Administrative issues with the exception of Warranty   |
| F         | 2%                    | 100%                       | Warranty, to be paid in <u>two equal installments</u> of 1% as noted: <ul style="list-style-type: none"><li>• F-1: 1% paid 6 months following the acceptance of the last option bus</li><li>• F-2: 1% paid 12 months following the acceptance of the last option bus</li></ul> |

**MBTA**  
**RFP 142F-20 / Technical Specification VE20-051**

**PROVISIONS**

The Authority has reviewed RFCs provided and has made best efforts to answer all RFCs submitted. Please be advised all questions should be submitted using the RFC form provided in RFP 142-20 Attachment 1.

**Amend Technical Specification VE20-051 as follows:**

**Page 29 – 2.16 – New/Improved System Software Escrow:**

Delete: Entire section

**Page 32 – 3.1.1 – Front Axle:**

Remove:

*“All front axle components shall be replaced by the Contractor with new OEM components, to include but are not limited to:*

- *Frame rail (axle) suspension bumpers*
- *Kingpins (including bushings, seals)*
- *Center link assembly including both ends, tube, clamps, and hardware*
- *Drag link assembly (including clamps and hardware)*
- *Shims*
- *All hardware*

*The Contractor shall inspect and re-use the following components:*

- *Beam, front axle*
- *Knuckles*
- *Steering arm rear streetside*
- *Streetside and Curbside Tire rod arms”*

Replace with:

*“The Contractor shall inspect and re-use the following components:*

- *Beam, front axle*
- *Knuckles*
- *Steering arm rear streetside*
- *Streetside and Curbside Tire rod arms*

*All remaining front axle components not mentioned above shall be replaced by the Contractor with new OEM components, to include but are not limited to:*

- *Frame rail (axle) suspension bumpers*
- *Kingpins (including bushings, seals)*
- *Center link assembly including both ends, tube, clamps, and hardware*
- *Drag link assembly (including clamps and hardware)*
- *Shims*
- *All hardware”*

**Page 38 – 3.7.1 – Engine and Accessories:**

Remove: *“Air cleaner and housing assembly, including primary and secondary filters, body assembly, access door with seal, u-clips, installation clamps, rubber elbows, and air restriction indicator”*

Replace with: *“Air cleaner and intake box assembly (including primary and secondary filters, body assembly with air cleaner seal to access door, u-clips, installation clamps, rubber elbows, and air restriction indicator)”*

**Page 40 – 3.9 – Hybrid Drive System:**

Delete: *“All cable tray covers shall be removed for inspection of all components (including clamps, cables, etc.). All cable trays are to be refinished/painted. All cable trays will be reassembled with new stainless-steel hardware. Any damaged components found shall be brought to the attention of the resident inspector for Hidden Damage consideration.”*

**Page 41 – 3.9.1. Energy Storage System (ESS):**

Remove: *“Modules shall be installed within the first six (6) months of the manufacture date.”*

Replace with: *Modules shall be installed within the first six (6) months of receipt by the prime contractor.*

**Page 42 – 3.9.4 – Integrated Starter Generator (ISG), Alternating Current Traction Motor (ACTM), and Planetary Speed Reducing Gearbox (PSR):**

Remove: *“The Contractor, working with BAE, shall present a more robust external sensor and cable connections as part of the design review process for MBTA review and approval. This upgrade will provide the necessary updates to the system to eliminate the ACTM hall effect speed sensor. [DRS #8].”*

Replace with: *“The Contractor, working with BAE, shall present a more robust external sensor and cable connections to the ACTM hall effect sensor and the elimination of the ISG hall effect sensor. The upgraded wiring and sensor elimination are to be submitted as part of the design review process for MBTA review and approval. [DRS #8].”*

**ALL ELSE REMAINS AS PREVIOUSLY STATED.**